REMARKS

Claims 1-11 have been canceled without prejudice. Claims 12 and 20 have been amended to more particularly point out what Applicant regards as the invention and/or make minor editorial effects, which are fully supported by the originally filed drawings (e.g., FIGS. 6-10) and related description of the specification. Claims 14, 16, 23, and 25 have been amended to correct claim dependency. Claims 18, 21, 22, and 24 have been amended to make minor editorial effects. Claim 26 has been added to cover the feature described in, e.g., FIG. 6. No new matter has been added.

Claim Rejections – 35 USC § 103

Claims 12-25 stand rejected allegedly as being obvious over Meyer et al. ("the Meyer reference") in view of Stevenson et al. ("the Stevenson reference") and/or in view of Hendrix et al. ("the Hendrix reference").

Claim 12 and dependent claims thereon

Independent claim 12, as amended, recites a method for producing a geogrid which includes longitudinal fiber-reinforced polymer strips and lateral fiber-reinforced polymer strips that are interconnected at a plurality of junctions to form a lattice structure. The claimed method features that longitudinal fiber-reinforced polymer strips arranged in parallel are bent ***at the same time to form ridges and valleys in each of the longitudinal fiber-reinforced polymer strips*** so that closed spaces are formed by the valleys and the ridges, and lateral fiber-reinforced polymer strips are ***inserted into the spaces at the same time to form first contact points*** at which lower surface portions of the longitudinal fiber-reinforced polymer strips are crossed with corresponding upper surface portions of the lateral fiber-reinforced polymer strips ***and second contact points*** at which upper surface portions of the longitudinal fiber-reinforced polymer strips are crossed with corresponding lower surface portions of the lateral fiber-reinforced polymer

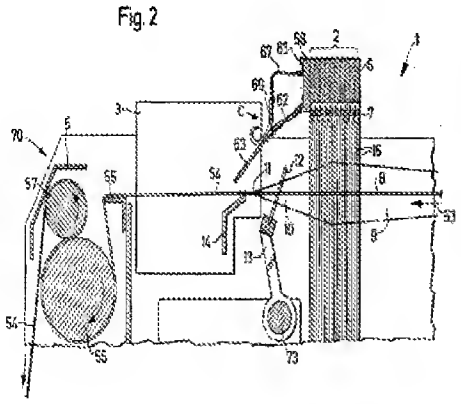
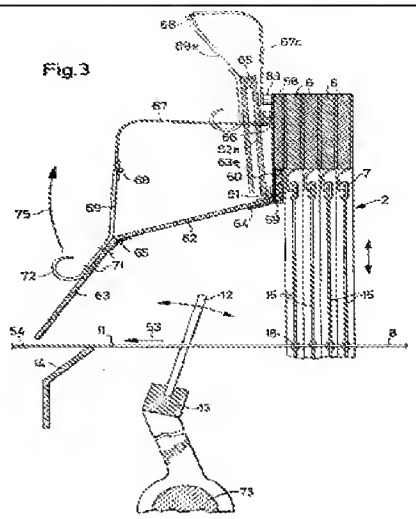
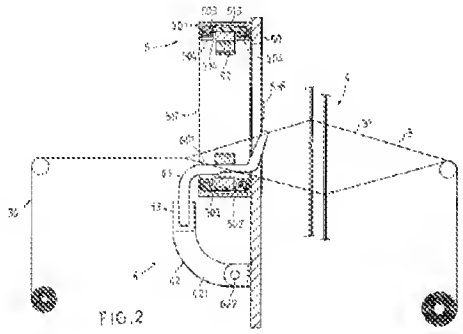
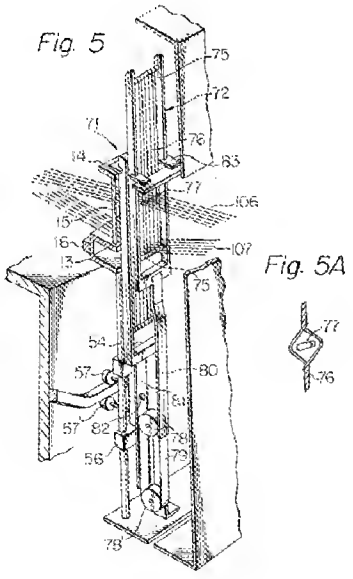
strips such that ***the first and second contact points are formed at positions corresponding to the junctions of the lattice structure while not being overlapping***.

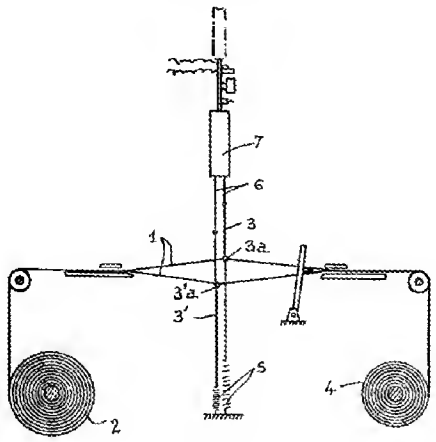
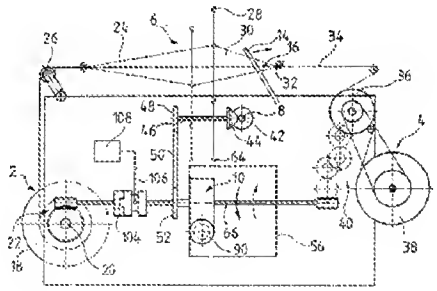
Among others, the features of the claimed method are neither disclosed nor suggested by the Meyer reference, the Stevenson reference, and the Hendrix references, singly or in combination.

In particular, the Meyer reference (col. 8, lines 51-54) and the Stevenson reference (col. 9, lines 1-2) describe as follows:

> The weaving process may be carried out on conventional loom equipment employed to weave polypropylene or polymeric textiles. In the preferred embodiment, the loom is a Sulzer loom, and the following members are used:
>
> The woven textile of the present invention may be formed on any conventional loom such as a Rapier loom. As

U.S. Patent No. 4,074,725 issued to Suzler Brothers, Ltd., US 6,269,842 (Fig. 2 and col. 2, lines 48~55), US 3,961,648 (Fig. 5 and col. 4, line 63 to col. 5, line 5 of Col. 5), EP 0214075 (Fig. 1), and EP 0116292 (Fig. 2), for example, disclose such conventional weaving processes using a loom.

US 4074725	Fig. 2 	Fig. 3 
US 6269842	 FIG. 2	col. 2, lines 48 to 55: Referring to FIG. 2, a first preferred embodiment of a weaving loom according to this invention is shown to include a warp supplying mechanism 3 for feeding warps 31, a shedding mechanism 4 for forming a shed between the warps 31, a weft picking mechanism 5 for picking a weft into the shed, a weft beating mechanism 6 for beating the picked weft into a fell in the shed, and a fabric collecting mechanism 30.
US 3961648	Fig. 5  Fig. 5A 	col. 4, line 63 to col. 5, line 5: direction. A heald frame guide plate 83, which guides the inner and outer heald frames 71 and 72 at their upper portions, is mounted just above the upper surface of the top shuttle race 14, so that the heald frames 71 and 72 are maintained in their given positions near the outside of the shuttle race, even if they are moved upwardly and downwardly. A plurality of heald wires 76, each of which is provided with one eye 77 at its center, is assembled on the heald frame by means of the upper and lower heald supporting rods 75 mounted on said heald frame. Each eye 77 preferably has an elon-

EP 0214075	Fig. 1 
EP 0116292	 Fig. 2

The conventional weaving process is different from the claimed method. More specifically, in the conventional weaving process, as described in US 4,074,725 (col. 2, lines 16-28 as reproduced below), after ***"one single"*** warp yarn (8) passes through eyes (16) of heddles (15), the heddles (15) are moved up and down (called "shedding motion") to form ***"one single"*** shed through which a weft yarn may pass, and then ***"one single"*** weft yarn passes through the shed (called "picking" or "weft insertion"). Subsequently, the shedding motion and picking are repeated to complete the weaving process.

> Referring to FIGS. 1 and 2, the weaving machine 1 is of the gripper shuttle type which has shafts 2 for forming a shed of warp yarns 8 disposed in a weaving plane, a picking mechanism 3 for shooting the

> shuttles, a catcher 4, a breast plate 5, weft supply bobbins 51 and a cloth beam 52. In operation, the warp yarns 8 move in the direction indicated by an arrow 53 through eyes 16 (FIG. 3) of heddles 15 of the shafts 2 to form a back shed 9. The warp yarns 8 then form a front shed 10 and pass through a reed 12 driven by a sley 13 to a beating-up station 11. The cloth 54 which is formed then passes by way of a breast beam 55, cloth roller 56 and pressing roller 57 to a cloth beam 52.

By contrast, according to the claimed method, ***insertion spaces (or sheds)*** through which lateral fiber-reinforced polymer strips are to be passed ***are formed at the same time*** in each of longitudinal fiber-reinforced polymer strips and ***lateral fiber-reinforced polymer strips are inserted into the insertion spaces at the same time***, thereby enabling mass production in a cost-effective way

Therefore, the rejections of claim 12 and its dependent claims should be withdrawn.

Claim 20 and dependent claims thereon

Independent claim 20, as amended, recites a method for producing a geogrid, which includes longitudinal fiber-reinforced polymer strips and lateral fiber-reinforced polymer strips that are interconnected at a plurality of junctions to form a lattice structure, by using a device provided with a strip arranging means. The strip arranging means has the structural features that it comprises a upper plate (51) and a lower plate (52) positioned to face the upper plate; the upper plate, the lower plate, or both are moveable so that the upper and lower plates can come closer to and get away from each other within a predetermined distance, a predetermined number of first bending members (80) are formed on the lower surface of the upper plate and a predetermined number of second bending members (90) are formed on the upper surface of the lower plate, and the first bending members and the second bending members are formed along a plurality of

spaced-apart lateral lines and a plurality of spaced-apart longitudinal lines such that the first and second bending members are formed at positions corresponding to the junctions of the lattice structure while not being overlapping.

The structural features of the strip arranging means, among others, are neither disclosed nor suggested by the Meyer reference, Stevenson reference, and the Hendrix reference, singly or in combination.

Therefore, the rejections of claim 20 and dependent claims thereon should be withdrawn.

Claims 21 and 22

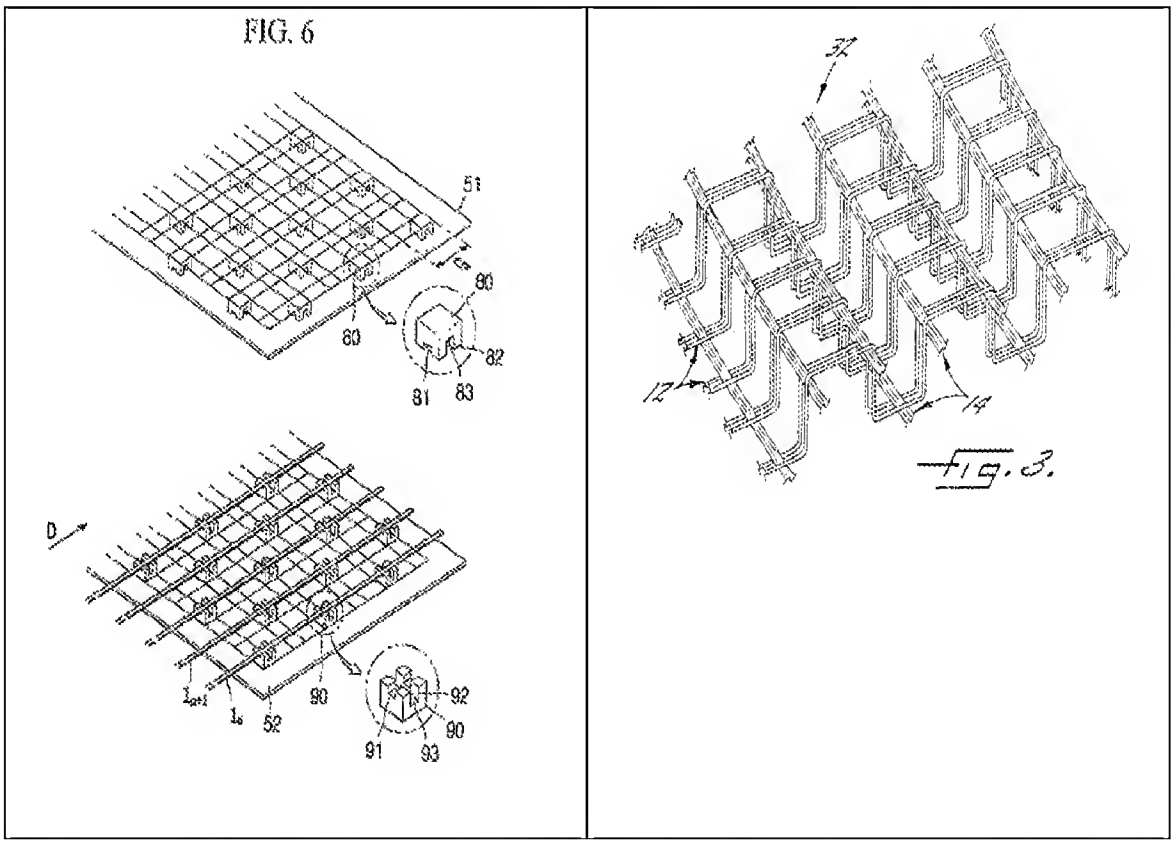
Claim 21 stand rejected as allegedly being obvious over the Meyer reference and the Stevenson reference in view of the Hendrix reference. In rejecting the claim, the Office Action stated that although the Meyer reference does not disclose a structure corresponding to the support grooves formed on the bending members of the instant application, the Hendrix reference discloses a structure corresponding to such support grooves (81, 91). Applicant disagrees because the Office erred in factual findings as discussed below.

In the present invention, as described on page 16, lines 3-9; page 17, lines 2-3; and Fig. 6 reproduced below, the strip arranging means (50) includes upper and lower plates (51, 52), the first and second bending members (80, 90) are provided on the surfaces of the upper and lower plates (51, 52) respectively, and the ***support grooves (81, 91) are formed on the first and second bending members (80, 90) respectively***.

By contrast, in the Hendrix reference, as shown in Fig. 3 reproduced below, a set of warp strands (12) is corrugated into alternating ridges and grooves, while a set of weft strands 14 remains substantially linear. That is, ***the grooves of the Hendrix***

reference are formed on the wrap strands themselves by the corrugation of the wrap strands.

Accordingly, since the Office erred in factual finding, the rejection of claim 21 should be withdrawn.



In addition, claim 22 stand rejected as allegedly being obvious over the Meyer reference in view of the Stevenson reference. In rejecting the claim, the Office stated that the Meyer reference (Fig. 2) and the Stevenson reference (Fig. 3B) disclose a structure corresponding to the through holes of claim 22. Applicant disagrees.

In the present invention, as described on page 16, lines 3-9; page 17, lines 2-3; and Fig. 6 reproduced above, ***the through holes (82, 92) are formed on the first and second bending members (80, 90) respectively***.

In contrast, the alleged through holes of Fig. 2 of the Meyers reference and Fig. 3B of the Stevenson reference are ***formed on the strands themselves***.

Accordingly, since the Office erred in factual finding, the rejection of claim 22 should be withdrawn.

In view of the foregoing, Applicant believes the pending application is in condition for allowance.

A one-month time extension is requested. The Director is authorized to charge the fee for time extension.

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Respectfully submitted,

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